

Calendar No. 138

110TH CONGRESS
1ST SESSION**H. R. 1867**

IN THE SENATE OF THE UNITED STATES

MAY 7, 2007

Received; read twice and placed on the calendar

AN ACT

To authorize appropriations for fiscal years 2008, 2009, and 2010 for the National Science Foundation, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “National Science
5 Foundation Authorization Act of 2007”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

8 (1) BOARD.—The term “Board” means the Na-
9 tional Science Board established under section 2 of

1 the National Science Foundation Act of 1950 (42
2 U.S.C. 1861).

3 (2) DIRECTOR.—The term “Director” means
4 the Director of the Foundation.

5 (3) ELEMENTARY SCHOOL.—The term “elemen-
6 tary school” has the meaning given that term by
7 section 9101(18) of the Elementary and Secondary
8 Education Act of 1965 (20 U.S.C. 7801(18)).

9 (4) FOUNDATION.—The term “Foundation”
10 means the National Science Foundation.

11 (5) INSTITUTION OF HIGHER EDUCATION.—The
12 term “institution of higher education” has the
13 meaning given such term in section 101(a) of the
14 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

15 (6) SECONDARY SCHOOL.—The term “sec-
16 ondary school” has the meaning given that term by
17 section 9101(38) of the Elementary and Secondary
18 Education Act of 1965 (20 U.S.C. 7801(38)).

19 **SEC. 3. AUTHORIZATION OF APPROPRIATIONS.**

20 (a) FISCAL YEAR 2008.—

21 (1) IN GENERAL.—There are authorized to be
22 appropriated to the Foundation \$6,500,000,000 for
23 fiscal year 2008.

24 (2) SPECIFIC ALLOCATIONS.—Of the amount
25 authorized under paragraph (1)—

1 (A) \$5,080,000,000 shall be made avail-
2 able for research and related activities, of which
3 \$115,000,000 shall be made available for the
4 Major Research Instrumentation program;

5 (B) \$873,000,000 shall be made available
6 for education and human resources, of which—

7 (i) \$94,000,000 shall be for Mathe-
8 matics and Science Education Partner-
9 ships established under section 9 of the
10 National Science Foundation Authorization
11 Act of 2002 (42 U.S.C. 1862n);

12 (ii) \$70,000,000 shall be for the Rob-
13 ert Noyce Scholarship Program established
14 under section 10 of the National Science
15 Foundation Authorization Act of 2002 (42
16 U.S.C. 1862n–1);

17 (iii) \$44,000,000 shall be for the
18 Science, Mathematics, Engineering, and
19 Technology Talent Expansion Program es-
20 tablished under section 8(7) of the Na-
21 tional Science Foundation Authorization
22 Act of 2002 (Public Law 107–368); and

23 (iv) \$51,620,000 shall be for the Ad-
24 vanced Technological Education program
25 established by section 3(a) of the Scientific

1 and Advanced-Technology Act of 1992
2 (Public Law 102–476);

3 (C) \$245,000,000 shall be made available
4 for major research equipment and facilities con-
5 struction;

6 (D) \$285,600,000 shall be made available
7 for agency operations and award management;

8 (E) \$4,050,000 shall be made available for
9 the Office of the National Science Board; and

10 (F) \$12,350,000 shall be made available
11 for the Office of Inspector General.

12 (b) FISCAL YEAR 2009.—

13 (1) IN GENERAL.—There are authorized to be
14 appropriated to the Foundation \$6,980,000,000 for
15 fiscal year 2009.

16 (2) SPECIFIC ALLOCATIONS.—Of the amount
17 authorized under paragraph (1)—

18 (A) \$5,457,400,000 shall be made avail-
19 able for research and related activities, of which
20 \$123,100,000 shall be made available for the
21 Major Research Instrumentation program;

22 (B) \$934,000,000 shall be made available
23 for education and human resources, of which—

24 (i) \$100,600,000 shall be for Mathe-
25 matics and Science Education Partner-

1 ships established under section 9 of the
2 National Science Foundation Authorization
3 Act of 2002 (42 U.S.C. 1862n);

4 (ii) \$101,000,000 shall be for the
5 Robert Noyce Scholarship Program estab-
6 lished under section 10 of the National
7 Science Foundation Authorization Act of
8 2002 (42 U.S.C. 1862n-1);

9 (iii) \$55,000,000 shall be for the
10 Science, Mathematics, Engineering, and
11 Technology Talent Expansion Program es-
12 tablished under section 8(7) of the Na-
13 tional Science Foundation Authorization
14 Act of 2002 (Public Law 107-368); and

15 (iv) \$55,200,000 shall be for the Ad-
16 vanced Technological Education program
17 as established by section 3(a) of the Sci-
18 entific and Advanced-Technology Act of
19 1992 (Public Law 102-476);

20 (C) \$262,000,000 shall be made available
21 for major research equipment and facilities con-
22 struction;

23 (D) \$309,760,000 shall be made available
24 for agency operations and award management;

1 (E) \$4,120,000 shall be made available for
2 the Office of the National Science Board; and

3 (F) \$12,720,000 shall be made available
4 for the Office of Inspector General.

5 (c) FISCAL YEAR 2010.—

6 (1) IN GENERAL.—There are authorized to be
7 appropriated to the Foundation \$7,493,000,000 for
8 fiscal year 2010.

9 (2) SPECIFIC ALLOCATIONS.—Of the amount
10 authorized under paragraph (1)—

11 (A) \$5,863,200,000 shall be made avail-
12 able for research and related activities, of which
13 \$131,700,000 shall be made available for the
14 Major Research Instrumentation program;

15 (B) \$1,003,000,000 shall be made avail-
16 able for education and human resources, of
17 which—

18 (i) \$107,600,000 shall be for Mathe-
19 matics and Science Education Partner-
20 ships established under section 9 of the
21 National Science Foundation Authorization
22 Act of 2002 (42 U.S.C. 1862n);

23 (ii) \$133,000,000 shall be for the
24 Robert Noyce Scholarship Program estab-
25 lished under section 10 of the National

1 Science Foundation Authorization Act of
2 2002 (42 U.S.C. 1862n-1);

3 (iii) \$60,000,000 shall be for the
4 Science, Mathematics, Engineering, and
5 Technology Talent Expansion Program es-
6 tablished under section 8(7) of the Na-
7 tional Science Foundation Authorization
8 Act of 2002 (Public Law 107-368); and

9 (iv) \$59,100,000 shall be for the Ad-
10 vanced Technological Education program
11 as established by section 3(a) of the Sci-
12 entific and Advanced-Technology Act of
13 1992 (Public Law 102-476);

14 (C) \$280,000,000 shall be made available
15 for major research equipment and facilities con-
16 struction;

17 (D) \$329,450,000 shall be made available
18 for agency operations and award management;

19 (E) \$4,250,000 shall be made available for
20 the Office of the National Science Board; and

21 (F) \$13,100,000 shall be made available
22 for the Office of Inspector General.

23 (d) MAJOR RESEARCH INSTRUMENTATION.—

24 (1) AWARD AMOUNT.—The minimum amount
25 of an award under the Major Research Instrumenta-

1 tion program shall be \$100,000. The maximum
2 amount of an award under the program shall be
3 \$4,000,000, except if the total amount appropriated
4 for the program for a fiscal year exceeds
5 \$125,000,000, in which case the maximum amount
6 of an award shall be \$6,000,000.

7 (2) USE OF FUNDS.—In addition to the acquisi-
8 tion of instrumentation and equipment, funds made
9 available by awards under the Major Research In-
10 strumentation program may be used to support the
11 operations and maintenance of such instrumentation
12 and equipment.

13 (3) COST SHARING.—

14 (A) IN GENERAL.—An institution of higher
15 education receiving an award shall provide at
16 least 30 percent of the cost from private or
17 non-Federal sources.

18 (B) EXCEPTIONS.—Institutions of higher
19 education that are not Ph.D.-granting institu-
20 tions are exempt from the cost sharing require-
21 ment in subparagraph (A), and the Director
22 may reduce or waive the cost sharing require-
23 ment for—

24 (i) institutions—

1 (I) which are not ranked among
2 the top 100 institutions receiving Fed-
3 eral research and development fund-
4 ing, as documented by the statistical
5 data published by the Foundation;
6 and

7 (II) for which the proposed
8 project will make a substantial im-
9 provement in the institution's capa-
10 bilities to conduct leading edge re-
11 search, to provide research experi-
12 ences for undergraduate students
13 using leading edge facilities, and to
14 broaden the participation in science
15 and engineering research by individ-
16 uals identified in section 33 or 34 of
17 the Science and Engineering Equal
18 Opportunities Act (42 U.S.C. 1885a
19 or 1885b); and

20 (ii) consortia of institutions of higher
21 education that include at least one institu-
22 tion that is not a Ph.D-granting institu-
23 tion.

24 (e) UNDERGRADUATE EDUCATION PROGRAMS.—The
25 Director shall continue to carry out programs in support

1 of undergraduate education, including those authorized in
2 section 17 of the National Science Foundation Authoriza-
3 tion Act of 2002 (42 U.S.C. 1862n–6). Funding for these
4 programs shall increase in proportion to the increase in
5 the total amount appropriated to the Foundation in any
6 year for which appropriations are authorized by this Act.

7 (f) LIMIT ON PROPOSALS.—

8 (1) POLICY.—For programs that require as
9 part of the selection process for awards the submis-
10 sion of preproposals and that also limit the number
11 of preproposals that may be submitted by an institu-
12 tion, the Director shall allow the subsequent submis-
13 sion of a full proposal based on each preproposal
14 that is determined to have merit following the Foun-
15 dation’s merit review process.

16 (2) REVIEW AND ASSESSMENT OF POLICIES.—

17 The Board shall review and assess the effects on in-
18 stitutions of higher education of the policies of the
19 Foundation regarding the imposition of limitations
20 on the number of proposals that may be submitted
21 by a single institution for programs supported by the
22 Foundation. The Board shall determine whether cur-
23 rent policies are well justified and appropriate for
24 the types of programs that limit the number of pro-
25 posal submissions. Not later than 1 year after the

1 date of enactment of this Act, the Board shall sum-
2 marize its findings and any recommendations re-
3 garding changes to the current policy on the restric-
4 tion of proposal submissions in a report to the Com-
5 mittee on Science and Technology of the House of
6 Representatives and to the Committee on Commerce,
7 Science, and Transportation and the Committee on
8 Health, Education, Labor, and Pensions of the Sen-
9 ate.

10 (g) RESEARCH EXPERIENCES FOR UNDERGRADU-
11 ATES.—The Director shall increase funding for the Re-
12 search Experiences for Undergraduates program in pro-
13 portion to the increase in the total amount appropriated
14 to the Foundation for research and related activities in
15 any year for which appropriations are authorized by this
16 Act.

17 (h) GLOBAL WARMING EDUCATION.—

18 (1) INFORMAL EDUCATION.—As part of Infor-
19 mal Science Education activities, the Director shall
20 support activities to create informal educational ma-
21 terials, exhibits, and multimedia presentations rel-
22 evant to global warming, climate science, and green-
23 house gas reduction strategies.

24 (2) K–12 INSTRUCTIONAL MATERIALS.—As
25 part of Discovery Research K–12 activities, the Di-

1 rector shall support the development of K–12 edu-
2 cational materials relevant to global warming, cli-
3 mate science, and greenhouse gas reduction strate-
4 gies.

5 **SEC. 4. CENTERS FOR RESEARCH ON LEARNING AND EDU-**
6 **CATION IMPROVEMENT.**

7 (a) **FUNDING FOR CENTERS.**—The Director shall
8 continue to carry out the program of Centers for Research
9 on Learning and Education Improvement as established
10 in section 11 of the National Science Foundation Author-
11 ization Act of 2002 (42 U.S.C. 1862n–2).

12 (b) **ELIGIBILITY FOR CENTERS.**—Section 11 of the
13 National Science Foundation Authorization Act of 2002
14 (42 U.S.C. 1862n–2) is amended—

15 (1) in subsection (a)(1), by inserting “or eligi-
16 ble nonprofit organizations” after “institutions of
17 higher education”;

18 (2) in subsection (b)(1) by inserting “or an eli-
19 gible nonprofit organization” after “institution of
20 higher education”; and

21 (3) in subsection (b)(1) by striking “of such in-
22 stitutions” and inserting “thereof”.

23 **SEC. 5. INTERDISCIPLINARY RESEARCH.**

24 (a) **IN GENERAL.**—The Board shall evaluate the role
25 of the Foundation in supporting interdisciplinary research,

1 including through the Major Research Instrumentation
2 program, the effectiveness of the Foundation's efforts in
3 providing information to the scientific community about
4 opportunities for funding of interdisciplinary research pro-
5 posals, and the process through which interdisciplinary
6 proposals are selected for support. The Board shall also
7 evaluate the effectiveness of the Foundation's efforts to
8 engage undergraduate students in research experiences in
9 interdisciplinary settings, including through the Research
10 in Undergraduate Institutions program and the Research
11 Experiences for Undergraduates program.

12 (b) REPORT.—Not later than 1 year after the date
13 of enactment of this Act, the Board shall provide the re-
14 sults of its evaluation under subsection (a), including a
15 recommendation for the proportion of the Foundation's re-
16 search and related activities funding that should be allo-
17 cated for interdisciplinary research, to the Committee on
18 Science and Technology of the House of Representatives
19 and the Committee on Commerce, Science, and Transpor-
20 tation and the Committee on Health, Education, Labor,
21 and Pensions of the Senate.

22 **SEC. 6. PILOT PROGRAM OF GRANTS FOR NEW INVESTIGA-**
23 **TORS.**

24 (a) IN GENERAL.—The Director shall carry out a
25 pilot program to award one-year grants to individuals to

1 assist them in improving research proposals that were pre-
2 viously submitted to the Foundation but not selected for
3 funding.

4 (b) USE OF FUNDS.—Grants awarded under this sec-
5 tion shall be used to enable an individual to resubmit an
6 updated research proposal for review by the Foundation
7 through the agency’s competitive merit review process.
8 Uses of funds made available under this section may in-
9 clude the generation of new data and the performance of
10 additional analysis.

11 (c) ELIGIBILITY.—To be eligible to receive a grant
12 under this section, an individual shall—

13 (1) not have previously received funding as the
14 principal investigator of a research grant from the
15 Foundation; and

16 (2) have submitted a proposal to the Founda-
17 tion, which may include a proposal submitted to the
18 Research in Undergraduate Institutions program,
19 that was rated very good or excellent under the
20 Foundation’s competitive merit review process.

21 (d) SELECTION PROCESS.—The Director shall make
22 awards under this section based on the advice of the pro-
23 gram officers of the Foundation.

1 (e) PROGRAM ADMINISTRATION.—The Director may
2 carry out this section through the Small Grants for Ex-
3 ploratory Research program.

4 (f) NATIONAL SCIENCE BOARD REVIEW.—The
5 Board shall conduct a review and assessment of the pilot
6 program under this section, including the number of new
7 investigators funded, the distribution of awards by type
8 of institution of higher education, and the success rate
9 upon resubmittal of proposals by new investigators funded
10 through this pilot program. Not later than 3 years after
11 the date of enactment of this Act, the Board shall summa-
12 rize its findings and any recommendations regarding
13 changes to or the continuation of the pilot program in a
14 report to the Committee on Science and Technology of the
15 House of Representatives and the Committee on Com-
16 merce, Science, and Transportation and the Committee on
17 Health, Education, Labor, and Pensions of the Senate.

18 **SEC. 7. BROADER IMPACTS MERIT REVIEW CRITERION.**

19 (a) IN GENERAL.—In evaluating research proposals
20 under the Foundation’s broader impacts criterion, the Di-
21 rector shall give special consideration to proposals that in-
22 volve partnerships between academic researchers and in-
23 dustrial scientists and engineers that address research
24 areas that have been identified as having high importance

1 for future national economic competitiveness, such as
2 nanotechnology.

3 (b) PARTNERSHIPS WITH INDUSTRY.—The Director
4 shall encourage research proposals from institutions of
5 higher education that involve partnerships with businesses
6 and organizations representing businesses in fields that
7 have been identified as having high importance for future
8 national economic competitiveness and that include input
9 on the research agenda from and cost-sharing by the in-
10 dustry partners.

11 (c) REPORT ON BROADER IMPACTS CRITERION.—
12 Not later than 1 year after the date of enactment of this
13 Act, the Director shall transmit to Congress a report on
14 the impact of the broader impacts grant criterion used by
15 the Foundation. The report shall—

16 (1) identify the criteria that each division and
17 directorate of the Foundation uses to evaluate the
18 broader impacts aspects of research proposals;

19 (2) provide a breakdown of the types of activi-
20 ties by division that awardees have proposed to carry
21 out to meet the broader impacts criterion;

22 (3) provide any evaluations performed by the
23 Foundation to assess the degree to which the broad-
24 er impacts aspects of research proposals were car-

1 ried out and how effective they have been at meeting
2 the goals described in the research proposals;

3 (4) describe what national goals, such as im-
4 proving undergraduate science, mathematics, and
5 engineering education, improving K–12 science and
6 mathematics education, promoting university-indus-
7 try collaboration and technology transfer, and broad-
8 ening participation of underrepresented groups, the
9 broader impacts criterion is best suited to promote;
10 and

11 (5) describe what steps the Foundation is tak-
12 ing and should take to use the broader impacts cri-
13 terion to improve undergraduate science, mathe-
14 matics, and engineering education.

15 **SEC. 8. POSTDOCTORAL RESEARCH FELLOWS.**

16 (a) MENTORING.—The Director shall require that all
17 grant applications that include funding to support
18 postdoctoral researchers include a description of the men-
19 toring activities that will be provided for such individuals,
20 and shall ensure that this part of the application is evalu-
21 ated under the Foundation’s broader impacts merit review
22 criterion. Mentoring activities may include career coun-
23 seling, training in preparing grant applications, guidance
24 on ways to improve teaching skills, and training in re-
25 search ethics.

1 (b) REPORTS.—The Director shall require that an-
2 nual reports and the final report for research grants that
3 include funding to support postdoctoral researchers in-
4 clude a description of the mentoring activities provided to
5 such researchers.

6 **SEC. 9. RESPONSIBLE CONDUCT OF RESEARCH.**

7 The Director shall require that each institution that
8 applies for financial assistance from the Foundation for
9 science and engineering research or education describe in
10 its grant proposal a plan to provide appropriate training
11 and oversight in the responsible and ethical conduct of re-
12 search to undergraduate students, graduate students, and
13 postdoctoral researchers participating in the proposed re-
14 search project.

15 **SEC. 10. REPORTING OF RESEARCH RESULTS.**

16 The Director shall ensure that all final project re-
17 ports and citations of published research documents re-
18 sulting from research funded, in whole or in part, by the
19 Foundation, are made available to the public in a timely
20 manner and in electronic form through the Foundation's
21 Web site.

22 **SEC. 11. SHARING RESEARCH RESULTS.**

23 An investigator supported under a Foundation
24 award, whom the Director determines has failed to comply
25 with the provisions of section 734 of the Foundation Grant

1 Policy Manual, shall be ineligible for a future award under
2 any Foundation supported program or activity. The Direc-
3 tor may restore the eligibility of such an investigator on
4 the basis of the investigator's subsequent compliance with
5 the provisions of section 734 of the Foundation Grant Pol-
6 icy Manual and with such other terms and conditions as
7 the Director may impose.

8 **SEC. 12. FUNDING FOR SUCCESSFUL STEM EDUCATION**
9 **PROGRAMS.**

10 (a) **EVALUATION OF PROGRAMS.**—The Director shall,
11 on an annual basis, evaluate all of the Foundation's grants
12 that are scheduled to expire within one year and—

13 (1) that have the primary purpose of meeting
14 the objectives of the Science and Engineering Equal
15 Opportunity Act (42 U.S.C. 1885 et seq.); or

16 (2) that have the primary purpose of providing
17 teacher professional development.

18 (b) **CONTINUATION OF FUNDING.**—For grants that
19 are identified under subsection (a) and that are deemed
20 by the Director to be successful in meeting the objectives
21 of the initial grant solicitation, the Director may extend
22 the duration of those grants for up to 3 additional years
23 beyond their scheduled expiration without the requirement
24 for a recompetition. The Director may extend such grants
25 for an additional 3 years following a second review within

1 1 year before the extended completion date, in accordance
2 with subsection (a), and the determination by the Director
3 that the objectives of the grant are being achieved.

4 (c) REPORT TO CONGRESS.—Not later than 2 years
5 after the date of enactment of this Act, the Director shall
6 submit a report to the Committee on Science and Tech-
7 nology of the House of Representatives and to the Com-
8 mittee on Commerce, Science, and Transportation and the
9 Committee on Health, Education, Labor, and Pensions of
10 the Senate that—

11 (1) lists the grants which have been extended in
12 duration by the authority provided under this sec-
13 tion; and

14 (2) provides any recommendations the Director
15 may have regarding the extension of the authority
16 provided under this section to programs other than
17 those specified in subsection (a).

18 **SEC. 13. COST SHARING.**

19 (a) IN GENERAL.—The Board shall evaluate the im-
20 pact of its policy to eliminate cost sharing for research
21 grants and cooperative agreements for existing programs
22 that were developed around industry partnerships and his-
23 torically required industry cost sharing, such as the Engi-
24 neering Research Centers and Industry/University Coop-
25 erative Research Centers. The Board shall also consider

1 the impact that the cost sharing policy has on initiating
2 new programs for which industry interest and participa-
3 tion are sought.

4 (b) REPORT.—Not later than 6 months after the date
5 of enactment of this Act, the Board shall report to the
6 Committee on Science and Technology and the Committee
7 on Appropriations of the House of Representatives, and
8 the Committee on Commerce, Science, and Transpor-
9 tation, the Committee on Health, Education, Labor, and
10 Pensions, and the Committee on Appropriations of the
11 Senate, on the results of the evaluation under subsection
12 (a).

13 **SEC. 14. DONATIONS.**

14 Section 11(f) of the National Science Foundation Act
15 of 1950 (42 U.S.C. 1870(f)) is amended by inserting at
16 the end before the semicolon “, except that funds may be
17 donated for specific prize competitions”.

18 **SEC. 15. ADDITIONAL REPORTS.**

19 (a) REPORT ON FUNDING FOR MAJOR FACILITIES.—

20 (1) PRECONSTRUCTION FUNDING.—The Board
21 shall evaluate the appropriateness of the require-
22 ment that funding for detailed design work and
23 other preconstruction activities for major research
24 equipment and facilities come exclusively from the
25 sponsoring research division rather than being avail-

1 able, at least in part, from the Major Research
2 Equipment and Facilities Construction account.

3 (2) MAINTENANCE AND OPERATION COSTS.—

4 The Board shall evaluate the appropriateness of the
5 Foundation’s policies for allocation of costs for, and
6 oversight of, maintenance and operation of major re-
7 search equipment and facilities.

8 (3) REPORT.—Not later than 6 months after
9 the date of enactment of this Act, the Board shall
10 report on the results of the evaluations under para-
11 graphs (1) and (2) and on any recommendations for
12 modifying the current policies related to allocation of
13 funding for major research equipment and facilities
14 to the Committee on Science and Technology and
15 the Committee on Appropriations of the House of
16 Representatives, and to the Committee on Com-
17 merce, Science, and Transportation, the Committee
18 on Health, Education, Labor, and Pensions, and the
19 Committee on Appropriations of the Senate.

20 (b) INCLUSION OF POLAR FACILITIES UPGRADES IN
21 MAJOR RESEARCH EQUIPMENT AND FACILITIES CON-
22 STRUCTION PLAN.—Section 201(a)(2)(D) of the National
23 Science Foundation Authorization Act of 1998 (42 U.S.C.
24 1862l(a)(2)(D)) is amended by inserting “and for major

1 upgrades of facilities in support of Antarctic research pro-
2 grams” after “facilities construction account”.

3 (c) REPORT ON EDUCATION PROGRAMS WITHIN THE
4 RESEARCH DIRECTORATES.—Not later than 6 months
5 after the date of enactment of this Act, the Director shall
6 transmit to the Committee on Science and Technology of
7 the House of Representatives and the Committee on Com-
8 merce, Science, and Transportation and the Committee on
9 Health, Education, Labor, and Pensions of the Senate a
10 report cataloging all elementary and secondary school, in-
11 formal, and undergraduate educational programs and ac-
12 tivities supported through appropriations for Research
13 and Related Activities. The report shall display the pro-
14 grams and activities by directorate, along with estimated
15 funding levels for the fiscal years 2006, 2007, and 2008,
16 and shall provide a description of the goals of each pro-
17 gram and activity. The report shall also describe how the
18 programs and activities relate to or are coordinated with
19 the programs supported by the Education and Human Re-
20 sources Directorate.

21 (d) REPORT ON RESEARCH IN UNDERGRADUATE IN-
22 STITUTIONS PROGRAM.—The Director shall transmit to
23 Congress along with the fiscal year 2011 budget request
24 a report listing the funding success rates and distribution
25 of awards for the Research in Undergraduate Institutions

1 program, by type of institution based on the highest aca-
2 demic degree conferred by the institution, for fiscal years
3 2008, 2009, and 2010.

4 (e) ANNUAL PLAN FOR ALLOCATION OF EDUCATION
5 AND HUMAN RESOURCES FUNDING.—

6 (1) IN GENERAL.—Not later than 60 days after
7 the date of enactment of legislation providing for the
8 annual appropriation of funds for the Foundation,
9 the Director shall submit to the Committee on
10 Science and Technology and the Committee on Ap-
11 propriations of the House of Representatives, and to
12 the Committee on Commerce, Science, and Trans-
13 portation, the Committee on Health, Education,
14 Labor, and Pensions, and the Committee on Appro-
15 priations of the Senate, a plan for the allocation of
16 education and human resources funds authorized by
17 this Act for the corresponding fiscal year, including
18 any funds from within the research and related ac-
19 tivities account used to support activities that have
20 the primary purpose of improving education or
21 broadening participation.

22 (2) SPECIFIC REQUIREMENTS.—The plan shall
23 include a description of how the allocation of fund-
24 ing—

1 (A) will affect the average size and dura-
2 tion of education and human resources grants
3 supported by the Foundation;

4 (B) will affect trends in research support
5 for the effective instruction of mathematics,
6 science, engineering, and technology;

7 (C) will affect the K–20 pipeline for the
8 study of mathematics, science, engineering, and
9 technology; and

10 (D) will encourage the interest of individ-
11 uals identified in section 33 or 34 of the
12 Science and Engineering Equal Opportunities
13 Act (42 U.S.C. 1885a or 1885b) in mathe-
14 matics, science, engineering, and technology,
15 and help prepare such individuals to pursue
16 postsecondary studies in these fields.

17 **SEC. 16. ADMINISTRATIVE AMENDMENTS.**

18 (a) TRIANNUAL AUDIT OF THE OFFICE OF THE NA-
19 TIONAL SCIENCE BOARD.—Section 15(a) of the National
20 Science Foundation Authorization Act of 2002 (42 U.S.C.
21 4862n–5) is amended—

22 (1) in paragraph (3), by striking “an annual
23 audit” and inserting “an audit every three years”;

24 (2) in paragraph (4), by striking “each year”
25 and inserting “every third year”; and

1 (3) by inserting after paragraph (4) the fol-
2 lowing new paragraph:

3 “(5) MATERIALS RELATING TO CLOSED POR-
4 TIONS OF MEETINGS.—To facilitate the audit re-
5 quired under paragraph (3) of this subsection, the
6 Office of the National Science Board shall maintain
7 the General Counsel’s certificate, the presiding offi-
8 cer’s statement, and a transcript or recording of any
9 closed meeting, for at least 3 years after such meet-
10 ing.”.

11 (b) LIMITED TERM PERSONNEL FOR THE NATIONAL
12 SCIENCE BOARD.—Subsection (g) of section 4 of the Na-
13 tional Science Foundation Act of 1950 (42 U.S.C.
14 1863(g)) is amended to read as follows:

15 “(g) The Board may, with the concurrence of a ma-
16 jority of its members, permit the appointment of a staff
17 consisting of not more than 5 professional staff members,
18 technical and professional personnel on leave of absence
19 from academic, industrial, or research institutions for a
20 limited term and such operations and support staff mem-
21 bers as may be necessary. Such staff shall be appointed
22 by the Chairman and assigned at the direction of the
23 Board. The professional members and limited term tech-
24 nical and professional personnel of such staff may be ap-
25 pointed without regard to the provisions of title 5, United

1 States Code, governing appointments in the competitive
2 service, and the provisions of chapter 51 of such title relat-
3 ing to classification, and shall be compensated at a rate
4 not exceeding the maximum rate payable under section
5 5376 of such title, as may be necessary to provide for the
6 performance of such duties as may be prescribed by the
7 Board in connection with the exercise of its powers and
8 functions under this Act. Section 14(a)(3) shall apply to
9 each limited term appointment of technical and profes-
10 sional personnel under this subsection. Each appointment
11 under this subsection shall be subject to the same security
12 requirements as those required for personnel of the Foun-
13 dation appointed under section 14(a).”.

14 (c) INCREASE IN NUMBER OF WATERMAN AWARDS
15 TO THREE.—Section 6(c) of the National Science Founda-
16 tion Authorization Act of 1975 (42 U.S.C. 1881a) is
17 amended to read as follows:

18 “(c) Up to three awards may be made under this sec-
19 tion in any one fiscal year.”.

20 **SEC. 17. NATIONAL SCIENCE BOARD REPORTS.**

21 Paragraphs (1) and (2) of section 4(j) of the National
22 Science Foundation Act of 1950 (42 U.S.C. 1863(j)(1)
23 and (2)) are amended by striking “, for submission to”
24 and “for submission to”, respectively, and inserting
25 “and”.

1 **SEC. 18. NATIONAL ACADEMY OF SCIENCE REPORT ON DI-**
2 **VERSITY IN STEM FIELDS.**

3 (a) IN GENERAL.—The Foundation shall enter into
4 an arrangement with the National Academy of Sciences
5 for a report, to be transmitted to the Congress not later
6 than 1 year after the date of enactment of this Act, about
7 barriers to increasing the number of underrepresented mi-
8 norities in science, technology, engineering, and mathe-
9 matics fields and to identify strategies for bringing more
10 underrepresented minorities into the science, technology,
11 engineering, and mathematics workforce.

12 (b) SPECIFIC REQUIREMENTS.—The Director shall
13 ensure that the study described in subsection (a) address-
14 es—

15 (1) social and institutional factors that shape
16 the decisions of minority students to commit to edu-
17 cation and careers in the science, technology, engi-
18 neering, and mathematics fields;

19 (2) specific barriers preventing greater minority
20 student participation in the science, technology, en-
21 gineering, and mathematics fields;

22 (3) primary focus points for policy intervention
23 to increase the recruitment and retention of under-
24 represented minorities in America’s future work-
25 force;

1 (4) programs already underway to increase di-
2 versity in the science, technology, engineering, and
3 mathematics fields, and their level of effectiveness;

4 (5) factors that make such programs effective,
5 and how to expand and improve upon existing pro-
6 grams;

7 (6) the role of minority-serving institutions in
8 the diversification of America's workforce in these
9 fields and how that role can be supported and
10 strengthened; and

11 (7) how the public and private sectors can bet-
12 ter assist minority students in their efforts to join
13 America's workforce in these fields.

14 **SEC. 19. SENSE OF THE CONGRESS REGARDING THE MATH-**
15 **EMATICS AND SCIENCE PARTNERSHIP PRO-**
16 **GRAMS OF THE DEPARTMENT OF EDUCATION**
17 **AND THE NATIONAL SCIENCE FOUNDATION.**

18 It is the sense of the Congress that—

19 (1) although the mathematics and science edu-
20 cation partnership program at the National Science
21 Foundation and the mathematics and science part-
22 nership program at the Department of Education
23 practically share the same name, the 2 programs are
24 intended to be complementary, not duplicative;

1 (2) the National Science Foundation partner-
2 ship programs are innovative, model reform initia-
3 tives that move promising ideas in education from
4 research into practice to improve teacher quality, de-
5 velop challenging curricula, and increase student
6 achievement in mathematics and science, and Con-
7 gress intends that the National Science Foundation
8 peer-reviewed partnership programs found to be ef-
9 fective should be put into wider practice by dissemi-
10 nation through the Department of Education part-
11 nership programs; and

12 (3) the Director of the National Science Foun-
13 dation and the Secretary of Education should have
14 ongoing collaboration to ensure that the 2 compo-
15 nents of this priority effort for mathematics and
16 science education continue to work in concert for the
17 benefit of States and local practitioners nationwide.

18 **SEC. 20. HISPANIC-SERVING INSTITUTIONS UNDER-**
19 **GRADUATE PROGRAM.**

20 (a) IN GENERAL.—The Director is authorized to es-
21 tablish a new program to award grants on a competitive,
22 merit-reviewed basis to Hispanic-serving institutions to
23 enhance the quality of undergraduate science, mathe-
24 matics, engineering, and technology education at such in-
25 stitutions and to increase the retention and graduation

1 rates of students pursuing associate's or baccalaureate de-
2 grees in science, mathematics, engineering, or technology.

3 (b) PROGRAM COMPONENTS.—Grants awarded under
4 this section shall support—

5 (1) activities to improve courses and curriculum
6 in science, mathematics, engineering, and tech-
7 nology;

8 (2) faculty development;

9 (3) stipends for undergraduate students partici-
10 pating in research; and

11 (4) other activities consistent with subsection
12 (a), as determined by the Director.

13 (c) INSTRUMENTATION.—Funding for instrumenta-
14 tion is an allowed use of grants awarded under this sec-
15 tion.

16 **SEC. 21. COMMUNICATIONS TRAINING FOR SCIENTISTS.**

17 (a) GRANT SUPPLEMENTS FOR COMMUNICATIONS
18 TRAINING.—The Director shall provide grant supple-
19 ments, on a competitive, merit-reviewed basis, to institu-
20 tions receiving awards under the Integrative Graduate
21 Education and Research Traineeship program. The
22 grant supplements shall be used to train graduate stu-
23 dents in the communication of the substance and impor-
24 tance of their research to nonscientist audiences, including
25 policymakers.

1 (b) REPORT TO CONGRESS.—Not later than 3 years
2 after the date of enactment of this Act, the Director shall
3 transmit a report to the Committee on Science and Tech-
4 nology of the House of Representatives, and to the Com-
5 mittee on Commerce, Science, and Transportation and the
6 Committee on Health, Education, Labor, and Pensions of
7 the Senate, describing how the activities required under
8 subsection (a) have been implemented. The report shall
9 include data on the number of graduate students trained
10 and the number and size of grant supplements awarded,
11 and a description of the types of activities funded through
12 the grant supplements.

Passed the House of Representatives May 2, 2007.

Attest: LORRAINE C. MILLER,
Clerk.

Calendar No. 138

110TH CONGRESS
1ST Session

H. R. 1867

AN ACT

To authorize appropriations for fiscal years 2008, 2009, and 2010 for the National Science Foundation, and for other purposes.

MAY 7, 2007

Received; read twice and placed on the calendar